

CLAIMS

What is claimed is:

1. A method comprising:
accessing a reference array, the reference array referencing at least one data object,
the at least one data object having a contents stored in memory;
determining a new memory location for the contents of each of the at least one
data object; and
copying the contents of the at least one data object to the new memory location
such that upon copying the contents of the new memory location, the data does not also
get stored to a cache memory.
2. The method of claim 1 wherein the contents of consecutively referenced data
objects are copied to consecutive memory locations.
3. The method of claim 2 wherein copying further includes copying the contents of
the at least one data object around the cache using a write combine operation.
4. The method of claim 3 implemented upon a computing system having a central
processing unit wherein an amount of data copied depends upon central processing unit
parameters.
5. The method of claim 4 wherein the computing system operates in a dynamic run-
time environment.

6. The method of claim 5 wherein the run-time environment is selected from the group consisting of JAVA and CLI.

7. The method of claim 6 implemented as the copy phase of a moving garbage collection algorithm.

8. A machine-readable medium that provides executable instructions, which when executed by a processor, cause the processor to perform a method, the method comprising:

accessing a reference array, the reference array referencing at least one data object, the at least one data object having a contents stored in memory;

determining a new memory location for the contents of each of the at least one data object; and

copying the contents of the at least one data object to the new memory location such that upon copying the contents of the new memory location is not stored to a cache memory.

9. The machine-readable medium of claim 8 wherein the contents of consecutively referenced data objects are copied to consecutive memory locations.

10. The machine-readable medium of claim 9 wherein copying further includes copying the contents of the at least one data object around the cache by exploiting the write combine feature of the non-temporal streaming store operation.

11. The machine-readable medium of claim 10 implemented upon a computing system having a central processing unit wherein an amount of data copied depends upon central processing unit parameters.

12. The machine-readable medium of claim 11 wherein the computing system operates in a dynamic run-time environment.

13. The machine-readable medium of claim 12 wherein the run-time environment is selected from the group consisting of JAVA and CLI.

14. The machine-readable medium of claim 13 implemented as the copy phase of a moving garbage collection algorithm.

15. An apparatus comprising:

a register to hold a reference array, the reference array referencing at least one data object, the at least one data object having a contents;

a memory region to hold the contents of the at least one data object; and

a central processing unit to determine a new memory location for the contents of each of the at least one data object, the contents of the at least one data object copied to the new memory location such that upon copying the contents to the new memory location, the data is not stored to a cache memory.

16. The apparatus of claim 15 wherein the contents of consecutively referenced data objects are copied around the cache to consecutive memory locations.

17. The apparatus of claim 16 wherein copying further includes copying the contents of the at least one data objected around the cache by exploiting the write combine feature of the non-temporal streaming store operation.

18. The apparatus of claim 17 implemented upon a computing system having a central processing unit wherein an amount of data copied depends upon central processing unit parameters.

19. The apparatus of claim 18 wherein the computing system operates in a dynamic run-time environment.

20. The apparatus of claim 19 wherein the run-time environment is selected from the group consisting of JAVA and CLI.

21. The apparatus of claim 20 implemented as the copy phase of a moving garbage collection algorithm.